ARMY PETROLEUM CENTER
The FUEL POINT
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FUEL TANKER ACCIDENT IN IRAQ

In the early morning hours of 26 January 2004, a convoy comprised of benzene (*gasoline*) tankers traveled west on a highway in Iraq to deliver their product. Just seven miles north of what is called the Safawan Bridge, the rear military escort vehicle developed mechanical problems requiring the convoy to stop. As the lead military vehicle attempted to slow down and move over to the right lane, it inadvertently caused an unfortunate chain of events.

To avoid a collision, the first tanker braked heavily and swerved to the right of the military escort vehicle. The result of the second tanker's braking caused a rear end collision with the third tanker. This caused both the second and third tankers to erupt in flames. The tankers separated from one another but both were on fire. The same series of events happened to the fourth and fifth tankers as well as the tenth and eleventh.

To make matters worse, a steep embankment alongside the road caused several tankers to leave the road out of control resulting in more fires. Eventually the inferno was responsible for damaging 17 tankers and the horrendous deaths of three subcontracted drivers.

Certainly, the distance between vehicles in the convoy, as well as heavy fog, had to be factors in the crashes but there is also a belief the type of fuel conveyed had a major impact as well.

While it is impossible to know the outcome of a similar crash if it involved JP-8, we do know that other situations of severe impact or collision did not result in the same disaster. This is also true when tankers during combat were struck by intense fire from weapons such as rocket propelled grenades.

Unexploded Rocket Propelled Grenade (RPG) hit into one of the KBR tankers loaded with JP-8. No secondary fire or explosion.

The judgment by DoD several years ago to utilize a single fuel on the battlefield not only provided better fuel quality and more efficient logistical support, but safer operations as well. Today, many in the petroleum community consider it one of DoD's best decisions.

ARMY API AWARDS PROGRAM

The APC is implementing an awards program, sponsored by the American Petroleum Institute (*API*), to identify and recognize excellence in Army fixed facilities petroleum management and operations and individual accomplishments in petroleum-related functions. We'll be kicking off a pilot program this year, with the intention of expanding to additional categories in future years.

Nominations for the Army Installation Fixed Facility Operation of the Year and the Army Installation Fixed Facility Operator/Maintainer of the Year are due by **30 Apr 04**. An awards ceremony will be held at the Worldwide Energy Conference planned for Sep 04 at the Hyatt Regency Crystal City, Arlington, VA.

More information on this program can be found at: http://usapc.army.mil/facilities_management/apiannounce.asp

RECENTLY ISSUED GUIDANCE

Check out the APC web site for recently issued guidance on:

- M978 HEMTT, Petroleum Tank Vehicle, Filter Separator Pressure Differential (*PD*) Gauge, 30 Dec 03
- Contaminated Turbine Engine Oil, MIL-PRF-7808, NSN: 9150-00-782-2679, Contract SP0450-03-D-4024, 13 Feb 04

ACES MISSION - CHARLESTON

Once again the Defense Energy Support Center credits the Army with alleviating a major fuel problem. Members of the 309th Transportation Company (*TC*), United States Army Reserve and the 1067th Transportation Company, United States Army National Guard from Pennsylvania were notified that a batch of fuel destined for the Macon, GA Defense Fuel Supply Point (*DFSP*) was off specification and could not be delivered to the Air Force. Since there were not enough commercial trucks available to handle the daily requirements of Warner Robins and Moody Air Force bases, the Army stepped in.

Mustering 60 soldiers who were already on active duty call up from Ft. Dix, NJ, Captain Todd Thomson manned 24 tankers and, with their support staff, began the two day drive to Charleston, SC to pick up fuel. It was while transporting the JP-8 from Charleston enroute to the Air Bases that another problem came to light. The 3rd Infantry Division was conducting a major exercise which severely depleted the fuel resources of Ft. Stewart, GA. Again, the 309th TC met the challenge head-on by diverting three tankers to Ft. Stewart, who dropped their first load, then filled up at Hunter Army Airfield and returned to Ft. Stewart dropping off six more loads. Fighting fatigue, the personnel returned to Charleston, SC to get enough rest to begin the process all over again at 8 the next morning.

(Soldiers being welcomed and briefed on the operation at DFSP Charleston by SFC Tony Eakins, DESC-AME, QAR)

When the mission was completed on 19 December 2003, the 309th Composite Transportation Company had delivered 1,950,000 gallons with 24 Army tankers comprising 269 loads of JP-8. They drove 141,262 mission miles in all types of weather and road conditions, not to mention the long road hours.

Still, in spite of their achievement, the 309th was well aware that the mission would not have been successful without the assistance of Warner Robins AFB and the Air National Guard, along with Moody and Charleston AFB personnel, who assisted in offloading the trucks.

It definitely was a joint operation (*with Army Reserve and National Guard truckers delivering to active and National Guard Air Force bases, as well as to the Active Army*) and stands as a tribute to inter-service cooperation and unity of purpose.

(*Article submitted by MSG Edward T. Lisowski, DESC-Americas East, NCOIC*)

267th QM SUPPORTS CJLOTS

The 267th Quartermaster Company Pipeline Petroleum and Terminal Operations (PP&TO), stationed at Ft. Lee, VA, participated in the New Horizons 2004, Combined Joint Logistics Over-the-Shore (CJLOTS) Exercise from 12 Feb to 10 Mar 04 in Puerto Castilla, Honduras. The PP&TO Company was responsible for the assembly of a small tactical petroleum terminal consisting of 420K gallons of base terminal storage, one pump station, and construction and operation of 1.3 miles of pipeline to two 750K existing host nation tanks used as the head storage. During the exercise, there were numerous distinguished visitors, including the United States Ambassador to Honduras, Larry Leon Palmer. The guests were all very impressed with the OPDS and IPDS interface. In all, the 267th QM CO (PP&TO) pumped approximately 1.1 million gallons of simulated petroleum product through its terminal, pump station, and pipeline. The joint capability mission was successfully exercised and demonstrated during this JCS exercise.

(Article submitted by CPT Aubrey S. Hinds, active duty Commander of the 267th QM CO)

185th QM BATTALION (*POL*) LABORATORY BRANCH – "PRIME TIME" TRAINING WITH THE NAVY

A contingent of five soldiers from the Fresno, California based 185th Quartermaster Battalion (*POL*), Petroleum Laboratory Branch deployed to Naval Base Point Loma, San Diego, California to conduct training at the Point Loma Fuel Terminal. The Petroleum Laboratory specialists had the opportunity to utilize their 92L (*Laboratory Specialist*) Military Occupation Specialty (*MOS*) with specialized petroleum laboratory equipment and professional instruction.

185tn Soldiers with lab site chemist (L-R, SPC Meyer, SPC Bravo, PFC Bumbaca, Digna Feria, SGT Pindel, not pictured LT Pressley)

Petroleum lab site Naval Base Point Loma personnel provided instruction, practical exercise, and various petroleum testing operations. Specific duty-related training included the full spectrum of Officer, NCO, and enlisted tasks.

In addition to training and performing their petroleum branch mission, the soldiers had the opportunity to experience additional petroleum-related opportunities. Events included a tour of the facility, lab equipment familiarization, conducting real world petroleum testing, fuel analysis, safety procedures and equipment. Specific fuel testing and operations included working with JP-5 and JP-8 fuel. Orientation of equipment included proper cleaning procedures for all testing equipment and glassware. Sustainment training included API gravity flashpoint, distillation, copper strip corrosion, existent gum, freeze point, and water reaction modules.

Overall, the soldiers were impressed with the training opportunity and the knowledge of the Point Loma petroleum facility personnel and equipment utilization. SPC Meyer (*92L Specialist*) stated, "I really enjoyed operating the fuel equipment; the last time I had the opportunity to utilize my lab skills and use petroleum lab equipment was during initial entry training at Fort Lee." This opportunity has opened the gates for additional petroleum-related training exercises for both drill weekends (*IDT*) and potential annual training events (*AT*). The utilization of the facility enabled soldiers to train on lab equipment which provided "prime time" training. Unfortunately, the lab system that is authorized for their section is currently being redesigned and has not been fielded to the unit. The Battalion leadership is committed to finding innovative ways to engage soldiers in MOSQ sustainment. LTC Brun (*BN Commander, 185th QM*), in closing, stated, "If we do not have the equipment on hand, we will find the equipment to put in the hands of our soldiers."

The 185th QM Battalion is an Army Reserve Unit based in Fresno, CA.

(*Article submitted by Major Julian H. Bond (XO, 185th QM BN*)

FUEL FILTER ELEMENTS - FIT

S9C has been investigating a problem with Coalescer Elements in the M978 HEMTT Tankers with the newer style API Filter Separator. It was reported that some of the elements don't fit the filter separator.

Basically, the elements were built in two different lengths--the difference being ½ inch.

This will be corrected. In the interim, the contractor will provide a no cost replacement for any CA22-3SB element that does not fit the M978 API version of the Filter Separator. These elements are ordered under NSN 4330-01-458-9915.

If you receive a non-conforming element, please submit a QDR to DLA so that they can document the issue.

(This article was written by Jim Howard and was originally included in the December 2003 issue of "The HEMTT Improvement Program (HIP) Times." It is reprinted with permission.)

NOTE: If you would like to receive an electronic copy of future HIP Times newsletters, send an email to: schradel@tacom.army.mil. For a hard copy, please include the following information: Unit/Organization Name; POC Name; P.O. Box and/or Street Address; City; State; and Zip.

Fueling Freedom's Finest

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TRI-SERVICE FUEL USERS GROUP MEETING

The USAPC hosted the most recent Tri-Service Fuel Users Group meeting on 10-11 February 2004 in New Cumberland, PA. Attendees included not only the DoD's Class III Service Control Points and R&D Activities, but also the 49th QM Group and the USAQMC&S, Petroleum & Water Department.

The meeting strengthened cooperative efforts of the Services in addressing fuel quality issues that are critical to end users. A range of topics were discussed including: testing of corrosion inhibitors/lubricity improvers; recommended formats for quality automation in support of a DESC initiative; joint review of Service tactical testing capability; joint R&D efforts for a new method of field testing filter separators; and agreement to develop additional guidance on injection of static dissipating additive.

ARMY CONTINUES PHASING IN CONUS USE OF COMMERCIAL DIESEL FUEL

In June 2001, the APC, in concert with TARDEC and DESC, established a pilot program to transition Army installation customers in 14 mid-western states to the use of commercial diesel fuel in lieu of Federal specification diesel fuel.

The program was closely monitored for two years by APC through direct installation customer contact and submission of fuel samples to the APC testing facility. Results of the program yielded positive customer satisfaction feedback with the operability aspects of the commercial product provided as well as verification of quality characteristics from samples submitted for testing.

In January 2004, Army customers in California, Nevada, Utah, Arizona, and Alaska were notified of their inclusion beginning in September 2004. Barring any unforeseen deterrents, the APC intends to continue phasing in all other geographical regions of CONUS as their new requirements contract periods come on-line.

AIT COMMENCEMENT CEREMONY

In December of 2003, Ft. Lee, VA once again was the site for the commencement ceremony of the latest class of 92F (*Petroleum Specialist*) graduates from Advanced Individual Training (*AIT*). Consisting of 73 soldiers from the active Army, Army Reserve, and Army National Guard, the class heard the keynote address delivered by MSG Ed Lisowski. Also in attendance were the Director, Petroleum and Water Department, Mr. Marshall Jones, as well as instructors, drill sergeants, and family members.

MSG Lisowski's presentation stressed the importance of DESC's and DLA's commitment to worldwide petroleum support. The graduates were also reminded that AIT was not the end of their training but rather the beginning. During the year, Ft. Lee provides training for literally thousands of Petroleum Specialists (*including Navy and USMC personnel*) at its facility.

UPCOMING EVENTS

- QLLEX 04 Final Planning Workshop - 2-4 Apr 04
- DoD EA Component Steering Group Meeting – 22 Apr 04
- QLLEX 04 Exercise – May through Jun 04
- Worldwide Energy Conference and Tradeshow, Hyatt Regency Crystal City, Arlington, VA – 27-30 Sep 04
- FAS Operators' Training – 19-23 Apr 04
- FAS Orientation – 20-21 Apr 04
- FAS Operators' Training – 17-21 May 04
- FAS Managers' Training – 24-28 May 04
- FAS Operators' Training – 21-25 Jun 04
- FAS Operators' Training – 19-23 Jul 04

How To Get More Information?

For more information on a variety of useful petroleum-related support topics, requirements, and facility assistance issues, visit the APC web site at:

http://usapc.army.mil

IDENTAPLATES / AIR CARDS

Experts caution us not to have more than one or two credit cards for obvious reasons. Why then, does Ms. Lynn Redmond of the US Army Petroleum Center have thousands? The answer is simple; she is the Service Input Point for aviation fuel cards.

At this point in time, each Army aircraft is required to have an Identaplate and an AIR (*Aviation Intoplane Reimbursement*) Card on board. The Identaplate is used only at military installations and is basically a card with billing information embossed on the front. Although the Identaplate has been in use for years, it is soon to be replaced by the AIR Card.

The advantage of the AIR Card over the Identaplate is the magnetic strip on the back which permits electronic billing. As of this writing, the AIR Card can only be used at commercial facilities. Currently, a test program is being conducted at Davison Army Airfield utilizing AIR Cards for the first time at an Army installation. When the test is completed, the Identaplates will be phased out.

Ms. Redmond processes approximately 50 to 100 requests for cards a month from Army activities worldwide. Although she continues to receive some requests on a DA Form 4701R, activities are encouraged to visit the APC website--where a request form can be filled out and electronically submitted. Turn around time for the issue of Identaplates and AIR Cards is usually about 10 days. If Ms. Redmond receives an urgent requirement with justification she can issue the cards as soon as the next day.

The importance of notifying her of any change in ownership of the aircraft cannot be overemphasized. Failure to change billing data will result in the losing unit being billed for all future charges. For this reason, the losing unit should notify Ms. Redmond, in writing, either by email or fax. Minimum information required is the gaining unit's DODAAC and point of contact, AIR Card number, and tail number. Just as important, aircraft no longer in service must be identified so they can be deleted from the data base.

Specific questions about aviation fuel cards can be directed to Ms. Redmond at DSN 771-4993 or Commercial (717) 770-4993.

Email comments, suggestions, or articles to:

APCFuelPoint@usapc-emh1.army.mil

MANAGING PACKAGED PETROLEUM PRODUCTS

Nothing can have a more detrimental effect on your operating budget than the mismanagement of packaged petroleum products. A good quality surveillance program needs to be managed on a first in/first out basis. Just as in a commercial grocery store, the oldest products should be to the front of your shelves with the newer products to the rear. All batches/lots should be separated. The key to a good packaged petroleum management program is rotation of stock. If you have a handle on operational and deployment requirements, you can keep your inventory to a minimum and well within the expiration dates.

Another area of petroleum management often overlooked is changes to your equipment. Disposal of equipment or modifications may require different products. Products no longer needed should be purged from your system. Unit maintenance personnel or hazardous material operators are an excellent source of information when making determinations. The Quality Status List (*QSL*) should be used to update the shelf-life information annotated on package containers. The QSL can be accessed by NSN, DLA Contract Number, and Lot/Batch. Products identified as having an extended shelf-life should be marked directly on the container with indelible ink or by using file labels. It is imperative that stock control cards contain condition codes and if the product is intended for disposal. Products being discarded should be clearly identified so they are not accidentally used. All of the above procedures should be contained in a Standing Operating Procedure (*SOP*), the "backbone" of any good management program. AR 710-2, Inventory Management Supply Policy Below the Wholesale Level; DA PAM 710-2-1, Using Unit Supply System; and the Shelf-Life Management Manual, DoD 4140.27-M are invaluable aids for documenting policies.

Call the APC representative at DSN 771-5868/6511 or Commercial (717) 770-5868/6511 for more information.

APC Telephone Numbers

Director	703-767-0645
Deputy Director	717-770-7203
Executive Officer	717-770-7101
Product Assurance Division (*lab*)	717-770-6511
Support Team	717-770-7040
Technical Team	717-770-5582
Operations Team	717-770-8580
Facilities & Operations Division *(Ft. Belvoir)*	703-767-0649

RADIAN SPECIALISTS IN IRAQ

(by Orville Boston)

It has been a hot, dusty day. It is evening; supper has been had; the shower was hot; and I am thinking of going to sleep. Then the call comes in; there is trouble at Pump Station 6. My day is not quite over yet. By the time I hit the sack it will be around 0100 hours (*1:00 AM*).

The days really are hot, about 115^{o} F and higher. The shower water (*and many times the drinking water*) is hot because it has been heated by the sun all day and it won't be much cooler in the morning. Hitting the sack consists of a sleeping bag (*which I sleep on, not in*) and a cot. And the days can be quite long. Such is the life of Radian at the front.

There are two of us here, Randy Simpson and myself (*Orville Boston*); and we have been in theater since the end of February. We have traveled from Camp Arifjan (*close to Kuwait City*) to northeast of Baghdad supporting the bulk petroleum supply mission of the 49th Quartermaster (*QM*) Group (*Petroleum and Water*). We provide technical expertise in the site selection, construction, operation, and maintenance of the Inland Petroleum Distribution System (*IPDS*) to the 49th QM Group. We also gather data and test repair kits on the collapsible fabric tanks used to store the fuel for the Army's Tank-automotive and Armaments Command (*TACOM*).

Orville Boston (left) and Randy Simpson (right) mix a PRC-DeSoto repair kit for a leaking 210,000 gallon collapsible fuel storage tank.

IPDS is a military petroleum pipeline and storage system that is used to provide bulk fuel support in areas where the infrastructure is not sufficient to support planned military operations. Most of us would think in the land of oil there would be plenty of petroleum support facilities available. However, most of the facilities are geared toward taking oil from the country interior to ports for export and it is almost impossible to reverse the designed flow of a pipeline. In addition, because the in-country facilities pump crude oil, they are not suitable for use with a refined product such as Jet Propulsion 8 (*JP-8*), the Army's fuel of choice. Combining those facts with the poor condition Iraqi facilities are in makes IPDS necessary even in a land that is rich in oil.

IPDS equipment is currently being used to provide fuel through about 180 miles of pipeline in conjunction with storage facilities capable of storing over 14 million gallons of product to support the war effort as well as follow-on forces staying in-country. At one point, nearly 245 miles of IPDS was constructed and in use. Pipeline distribution is important because it takes fewer soldiers to supply fuel by pipeline than truck. It also serves to keep a large number of trucks off the supply routes making traffic congestion less of a problem. The IPDS equipment will continue to be used as long as the mission requires large amounts of fuel that cannot be supplied more efficiently by other means.

The pipeline supplied approximately 60 million gallons of fuel in support of our soldiers. Combined with IPDS storage facilities that are not connected to the military pipeline, a total of 90 million gallons were supplied since the first piece was put in operation. To keep the system functioning, numerous repairs to pumps, tanks, and other equipment have been performed as needed. Our support teams, in the Petersburg, VA office and at Ft. Pickett, VA, are instrumental in providing parts and guidance in support of this effort as well as keeping our families informed during the times we have been without communications.

Choosing to be away from your family and going in harm's way are not easy decisions to make. Before we retired, we both served with the 49th QM Group; and, as part of our "normal" job with Radian, we train soldiers in IPDS operations. Because of our service and our work with Radian we know many of the soldiers deployed over here personally and they are like an extended family to us. This, combined with the support from the Radian Team at home, makes it much easier to be here representing Radian and serving our country.

"LEADERSHIP" CHANGES

- US Army Tank-automotive and Armaments Command (*TACOM*) - Ms. Marion Whicker was assigned as Group Leader for Petroleum and Water Systems on 9 Feb 04.

- Defense Energy Support Center (*DESC*) – COL Stephen Passero, DESC Director of Operations, retired in January 2004. COL Keith Stedman was assigned as the new Director of Operations. He also continues to serve as Commander, DESC-Americas.

- DESC – Mr. Mark Iden was reassigned as DESC's Director of Bulk Fuels.